Refinery Instruction Updates

Safety Topic of the Month
Richmond Refinery

February 2010

 DOC ID

Refinery Instructions (RIs)

Refinery Instructions are periodically revised and updated to better support our business and safety objectives.

This Safety Topic of the Month will review revisions to ten of our RIs with the intent of making the revisions easily accessible and provide a Refinery Wide learning opportunity.

- RI-314 – Protective Clothing and Safety Equipment
- RI-366 – Contractors
- RI-370 – Management of Change
- RI-389 – Electrical Safe Work Practices
- RI-392 – Heat Illness Prevention Plan
- RI-400 – Emergency Plans and Procedures
- RI-506 – Refinery Hazardous Waste Management
- RI-601 – H2S Handling Equipment

RI-314 – Protective Clothing and Safety Equipment

Revisions: [Section 7.1]

- Added hard hat color assignment: Red for Safety Personnel.
- Corrected helmet color references: Other Plant Protection personnel wear black helmets; Fire Brigade members wear yellow helmets.

Intent of the Revisions:

- To document current hard hat color assignments.

Revisions: [Section 7.2]

- Clarified that a face shield AND safety glasses must be worn when using striking tools.
- Added "welding helmet/hard hat combination" to the approved list of head and face protection for electric arc welding.

Intent of the Revisions:

- To clarify task-specific PPE requirements.

RI-314 – Protective Clothing and Safety Equipment (continued)

Revision: [Section 7.9]

- Created a new section 7.9: States the requirement to wear personal hydrogen sulfide monitors when working in process areas (including the tank field), and includes policies and procedures related to:
  - Proper Use
  - Maintenance
  - Testing

Intent of the Revision:

- To document the Refinery's policies and procedures related to wearing personal hydrogen sulfide monitors.

Personal Hydrogen Sulfide monitor classroom training was completed in 2009 for all Refinery personnel.

CUSA-CSB-0084891
EPA

RI-366 Contractors

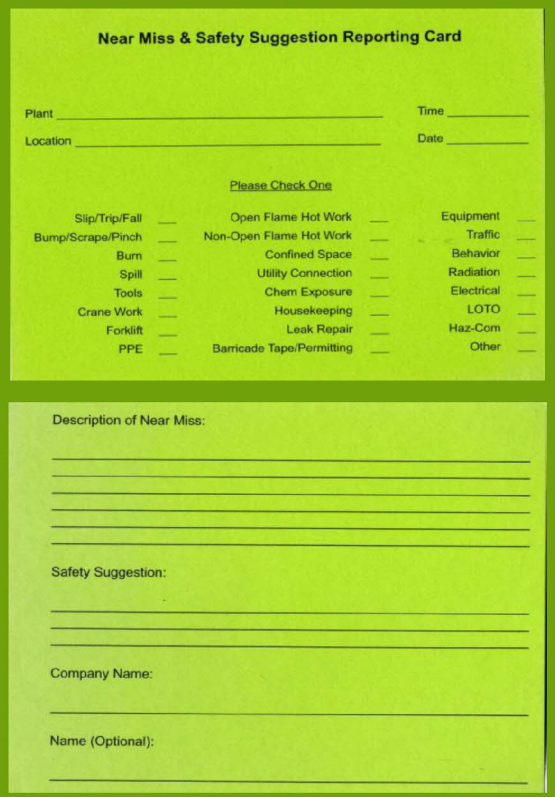
Revisions:

- Defined Process Safety Management (PSM) Representative roll regarding Contractor Office Audits.
- Appendix VI - Contractor Office Audit form, clarified and condensed Office Audit Questions.
- Replaced Appendix II with current version.

Intent of the Revision:

- Clarification of PSM Representative Rolls and Responsibilities in the Contractor Office Audit process.
- RI updated to reflect the current Near Miss & Safety Suggestion Reporting Card "Green Card" Appendix VII.

"Green Cards" for Reporting Near Misses and Safety Suggestions, Appendix VII



Near Miss & Safety Suggestion Reporting Card

Plant _____ Time _____

Location _____ Date _____

Please Check One

Slip/Trip/Fall ___	Open Flame Hot Work ___	Equipment ___
Bump/Scrape/Pinch ___	Non-Open Flame Hot Work ___	Traffic ___
Burn ___	Confined Space ___	Behavior ___
Spill ___	Utility Connection ___	Radiation ___
Tools ___	Chem Exposure ___	Electrical ___
Crane Work ___	Housekeeping ___	LOTO ___
Forklift ___	Leak Repair ___	Haz-Com ___
PPE ___	Barricade Tape/Permitting ___	Other ___

Description of Near Miss:

Safety Suggestion:

Company Name:

Name (Optional):

DOC ID

RI-370 – Management of Change (MOC)

MOC is one of our key **Process Safety Elements** and helps us ensure that changes are properly:

- risk assessed,
- reviewed, and
- approved by the right people

Revision: [Section 3.0]

The following new triggers have been added to what requires MOC.

- Temporary operation of equipment outside specifications (example: piping at or below flagged thickness)
- The following "guidance" documents which are used to maintain compliance with the requirements of the Cal/ARP and RISO program are now subjected to the MOC requirements:
  - Management of Organizational Change (MOOC), RI-382
  - Inherently Safer System (ISS)
  - Human Factors Program Documents

RI-389 – Electrical Safe Work Practices

The RI-389 revision has been certified as current and accurate as per NFPA-70E 2009 Edition.

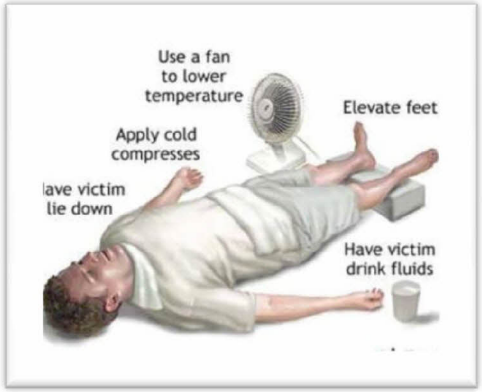
Review If report

IF Report Energized Switchgear

Upgraded circuit breaker (rear-view)

NEW RI-392 Heat Illness Prevention Plan

- Computer Based Training will be rolled out in Q2 2010 for Employees and Supervisors. The CBTs will cover the following:
  1. How to identify, evaluate, and control environmental and personal risk factors for heat illness.
  2. The importance of frequent consumption of small quantities of water.
  3. The importance of acclimatization.
  4. How to identify the different types of heat illness and the common signs and symptoms of heat illness.
  5. The importance of immediately reporting to your supervisor the symptoms or signs of heat illness in yourself, or in co-workers.
  6. The procedures for responding to symptoms of possible heat illness.
  7. The procedures for contacting emergency medical services.
  8. The procedures a supervisor is to follow when an employee exhibits symptoms consistent with possible heat illness, including emergency response procedures.



 DOC ID

RI-400 – Emergency Plans and Procedures

Revisions:

RI-400 has been adjusted to include the most up-to-date titles, contacts, and references, for the refinery:

- Titles such as RSC have been changed to RSL, Shift Supervisor to Shift Team Leader, etc.
- References to certain refinery instructions that no longer exist have been adjusted or deleted.
- Current refinery and agency contact information has been revised.

You can review all these changes and read over the instruction at the link below.

http://www.ric841.chevron.net/referenc/REF_INST/RI-New/ri-400/ri-400.pdf

DO YOU KNOW WHAT YOUR ROLE IS DURING A REFINERY EMERGENCY?

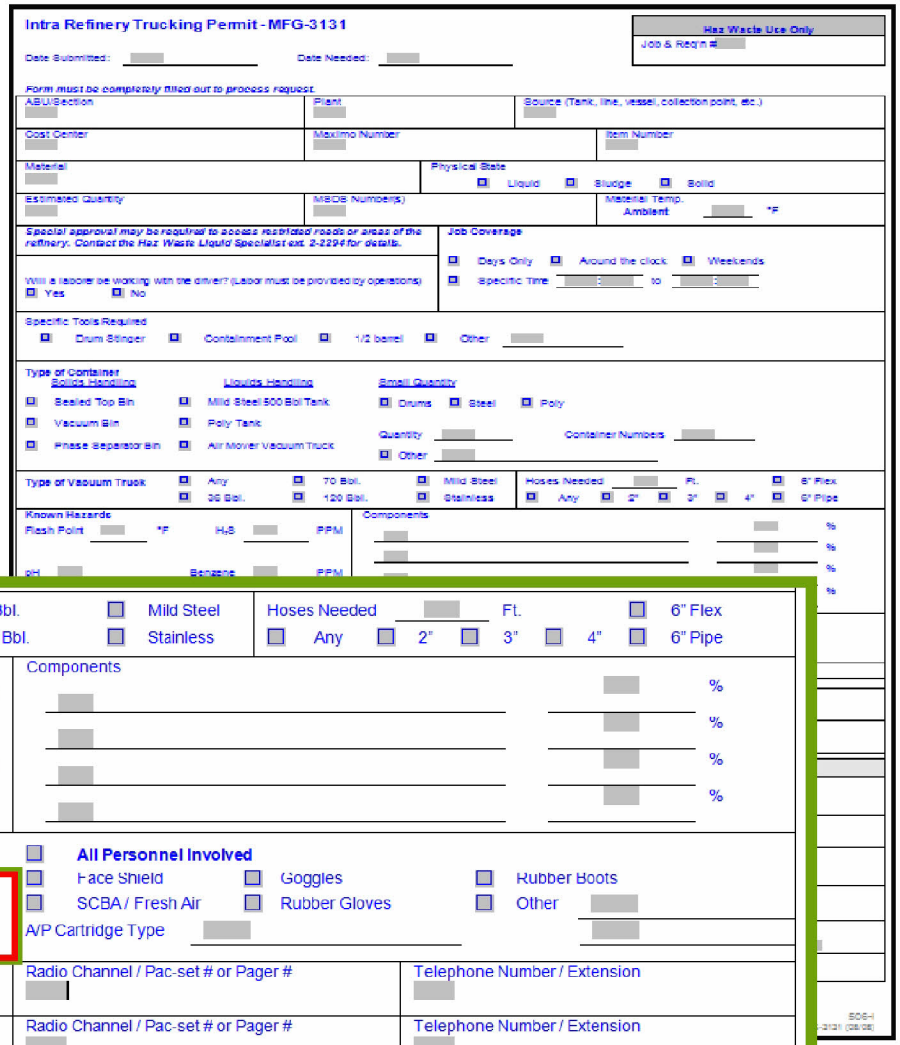
RI-506 – Refinery Hazardous Waste Management

Revision:

Ri-506 has been updated to include instructions for completing the Intra Refinery Trucking Permit , MFG-3131 (RI-506 9.0). *Be sure to include all Known Hazards and Safety Equipment Required!*

Link to **RI-506**

TOP Lessons Learned 7/2008


Intra Refinery Trucking Permit - MFG-3131

Haz Waste Use Only

Job & Req'n #

Date Submitted: Date Needed:

Form must be completely filled out to process request.

ASU/Section | Plant | Source (Tank, line, vessel, collection point, etc.)

Cost Center | Maximo Number | Item Number

Material | Physical State: Liquid Sludge Solid

Estimated Quantity | MSDS Number(s) | Material Temp. Ambient °F

Special approval may be required to access restricted roads or areas of the refinery. Contact the Haz Waste Liquid Specialist ext. 2-2294 for details.

Job Coverage: Days Only, Around the clock, Weekends, Specific Time to

Will a laborer be working with the driver? (Labor must be provided by operations) Yes No

Specific Tools Required: Drum Stinger, Containment Pool, 1/2 barrel, Other

Type of Container

Solids Handling: Sealed Top Bin, Vacuum Bin, Phase Separator Bin

Liquids Handling: Mild Steel 500 Bbl Tank, Poly Tank, Air Mover Vacuum Truck

Small Quantity: Drums, Steel, Poly, Quantity, Container Numbers, Other

Type of Vacuum Truck: Any, 70 Bbl., 120 Bbl., 36 Bbl., Mild Steel, Stainless

Hoses Needed: Any, 2", 3", 4", 6" Flex, 6" Pipe, Ft.

Known Hazards

Flash Point °F | H2S PPM | Benzene PPM | pH

Components %

Pressure PSI Other

Safety Equipment Required: Laborer(s) Only

All Personnel Involved: Face Shield, Goggles, Rubber Boots, SCBA / Fresh Air, Rubber Gloves, Other, A/P Cartridge Type

Contact Person | Radio Channel / Pac-set # or Pager # | Telephone Number / Extension

Supervisor's Signature | Radio Channel / Pac-set # or Pager # | Telephone Number / Extension

Known Hazards

Safety Equipment Required

RI-601 H2S Handling Equipment

RI-601 Provides guidance for the construction of new H2S handling new facilities. Provides guidance for repair and maintenance of existing H2S handling facilities

Revisions:

- Added new Corporate Pipe Class ref's
- Document references changed to reflect new CES home
- Added "example process streams" to H2S categories
- Valve packing requirements updated to ultra low or zero emission systems

If you have questions or just want to know more about this exciting field . . . .

. . . feel free to contact Ron Post @ 2-5170

Review TOP Lessons Learned

Learning from our past incidents will help us prevent them in the future. Please take a few minutes now to review the TOP lessons learned.

TOP Lessons Learned

Richmond Refinery 2010

Every Task,
The Right Way,
Every Time.

 DOC ID